Presentation before the Telecommunications Policy Review Panel,
Ministry of Industry, Canada

Regulation of Future Telecom Market - Part II

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While attempting to avoid as much as possible telling the members of this Panel things you already know, I feel I must begin by stating a few familiar propositions, subscribed to, I believe, by the overwhelming majority of economists as well as both our American Federal Communications Commission and your CRTC—that

- wherever it is likely to be both technologically feasible and "workable" or "effective," competition is far preferable to direct government regulation;
- of all kinds and generators of competition, technological innovation is the most powerful;
- in terms of both the necessary conditions for it and its consequences, such innovation is incompatible with theoretically pure or perfect competition. In this connection it gives me especial pleasure to call to your attention the assertion by a famous Canadian economist, John Kenneth Galbraith, that oligopoly is the most effective *generator* of innovation, and that successful innovation—as is recognized, for example, in our patent system—itself not only requires the prospect of exclusive enjoyment of its fruits but itself produces market power.[1]

What some of us may be old enough to remember was referred to for almost a century as the telephone business was until recently widely regarded, plausibly, as a natural monopoly, confined therefore to franchised, closely regulated monopoly suppliers. The sum total of the foregoing universal propositions is that once that rationale of natural monopoly ceases to be valid—once monopoly is no longer "natural"—the proper course is deregulation—subject, of

[1] John Kenneth Galbraith, *American Capitalism: The Concept of Countervailing Power*, revised edition. (Boston: Houghton Mifflin Company, 1956), pp. 86-94; citing also Joseph Schumpeter, *Capitalism, Socialism and* Democracy (New York: Harper Torchbooks, 1984).

course, to the antitrust and consumer protection laws applicable to all industries—*not some altered form of direct, industry-specific regulation*—and the sooner the better.

What has undermined and destroyed the "natural monopoly" of the telephone industry, epitomized in the fact that we now typically embrace it in the broader category of "telecommunications," has been technological "convergence"—the "convergence" of microwave and terrestrial-based long-distance communication, going back some half-century; the convergence of direct satellite and terrestrial transmission of video signals and now what the Panel's listed "themes" refer to as "telco-cable convergence."

The immediate, vital question confronting us in both our countries is *when* that convergence will have progressed sufficiently to recommend simple deregulation,[2] as we did in the case of the airlines, moving in telecommunications from the highly flawed institution of closely regulated monopoly to a reliance instead on the superior constraints and incentives of competition.

Until fairly recently, I have hesitated to go beyond the foregoing generalities, forcing myself to set forth criteria of effective competition sufficiently specific to provide guidance for the decision of when and where to deregulate.[3] The reason, which I have spelled out elsewhere,[4] has been my participation over the last half-century in the extended and inconclusive controversies among economists about the criteria of "effective" or "workable" competition once they had come generally to recognize the only limited usefulness of a pure or perfect competition model—which requires that individual sellers confront a perfectly elastic demand. Such a model or goal of policy is—indisputably—incompatible with both economies

[2] I emphasize that I refer here to the kind of direct, strictly economic and industry-specific regulation that, supplanting competition, controls entry and prescribes prices and other terms of service. I will refer briefly below to general regulations, applicable economy-wide, aimed at protecting consumers from deception and fraud, positively providing them with information that helps them make wise choices, as well as antitrust laws that seek to preserve competition as the critical discipline. However difficult to draw in practice, in principle the distinction is clear: the one protects or promotes efficient competition in the service of consumers, the other supplants or interferes with that competitive process.

[3] See most recently my "Reforming the FCC and Its Mission: Lessons from the Airline Experience," a paper presented at the Silicon Flatirons Conference, *The Digital Broadband Migration: Rewriting the Telecom Act*, in Boulder, Colorado, February 14, 2005, *Journal on Telecommunications and High Technology Law*, Fall 2005.

[4] Alfred E. Kahn, "Economic Justification for TELUS' Two-Facilities Bright-Line Forbearance Test," Appendix 3 to Comments of TELUS Communications Inc. in PN 2005-3, June 22, 2005, par. 24-28.

of scale and—as Joseph Schumpeter most eloquently pointed out—with technological innovation, the most powerful and productive kind of competition. Some, in quest of such a standard, have stressed the need for some assessment of the *structure* of markets or industries—including prominently the number and relative size or concentration of the sellers; others by evaluating the *results*: did they appear to be the results of effective competition?

Without burdening you with the details of these controversies, I believe the sardonic summary by the renowned Professor George J. Stigler of such overall economic assessments was not at all unfair:

> To determine whether any industry is workably competitive, therefore, simply have a good graduate student write his dissertation on the industry and render a verdict. It is crucial to this test, of course, that no second graduate student be allowed to study the industry.[5]

This observation, with whose implications I have agreed over the last half-century, does not exclude the possibility of a rational basis for regulatory forbearance. On the contrary, it merely excludes the application of a thoroughgoing economic definition and evaluation of the structure or performance of the relevant markets. Competition, I have consistently maintained, is a *process*, a kind of behavior of participants in a market. Its results are inherently unknowable, unpredictable—hence my consistent response to the question, "What is the structure of the airline industry going to look like after you have deregulated it?" or, today, in view of the profound financial difficulties of the major hub-and-spoke carriers and the increasingly successful competition of the more or less point-to-point low-cost carriers, "What is the structure of the industry likely to be in, say, five years?" has been: "If the answer to that question were knowable, there would be or have been no reason or need to deregulate"[6]

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5 "Report on Antitrust Policy: Discussion," *The American Economic Review, Papers and Proceedings,* Volume 46, May 1956, p. 505.

6 "Applications of Economics to an Imperfect World," The Richard T. Ely Lecture, *The American Economic Review, Papers and Proceedings*, Volume 69, No. 2, May 1979, p. 6:

> Our uncertainty about the outcome of the competitive struggle is no reason to prevent its taking place; the only sensible prescription is to give competitors freedom to slough off their artificial handicaps by entering and leaving markets, as they please.
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> Moreover, if we cannot *predict* how these offsetting advantages and handicaps of the several carriers are likely to work out under a regime of free entry, it seems to me even less likely that we can hope to

It is these conceptions—that competition is, above all else, a *process*, a form of behavior whose results are inherently unknowable, and that the only continuously reliable competition must be facilities-based, at wholesale as well as at retail[7]—that led me to react immediately and enthusiastically to the TELUS proposed bright line test as a solution to the problem of deciding when and where the time had come to deregulate, confidently leaving the protection and service of consumers to deregulated competition. The answer is: where rivals have constructed their own facilities and are *actively competing and in a position to compete* for customers. Is the competition real, in the sense of offering genuine alternatives—alternative bundles of services at differing prices—and likely to survive? The relevant market, product and geographic, by this test, would be defined by the services and geographic areas in which such competition actually occurs, *and* customers can be served by alternative facilities actually in place, at comparatively low incremental cost. Perhaps most important, the large sunk costs prominent in this industry—the costs of facilities already in place—provide a powerful indication of the ability and motive of incumbents to continue to compete rather than settle into oligopolistic quietude ("You stay in your market, I stay in mine"; "You keep your customers, I keep mine") or to hit and run.

Additional guarantees would be provided by developing technologies—the first three (telephone, cable and wireless) already ubiquitous, providing separate and competing platforms, others on the horizon—satellite and broadband via electric power lines, the feasibility of which has, I understand, already been demonstrated and offerings begun in selected market areas in the United States. Observe that these offer additional promise of assured access to the Internet and hence the offer of VoIP services by third and fourth parties. I find persuasive the perceptive statement of the FCC's former chairman Powell, as quoted by

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achieve the most efficient performance of the transportation function by *prescribing* how the thousands of markets should be served, as the proponents of the status quo would have us do. I find it difficult to see how these uncertainties tilt the balance in the direction of a reliance on predictably ignorant regulation in preference to an uncertainly predictable market process.

[7] This has been a consistent basis for my criticisms of the FCC's overly expansive definition and primarily hypothetical basis for costing and pricing of the unbundled network elements that they are required to make available to competitors—that they discouraged competitors' constructing and equipping their own facilities, even where it otherwise would have been economical for them to do so. See my *Lessons from Deregulation: Telecommunications and Airlines after the Crunch,* Washington D.C.: AEI-Brookings Joint Center for Regulatory Studies, 2004, pp. 28-41.

Neuchterlein and Weiser in their monumental *Digital Crossroads*, that "[m]agical things happen in competitive markets when there are at least three viable, facilities-based competitors."[8] A threshold question must surely be whether that standard—a sensible one, even in industries characterized by such turbulent technology—is or will be met.

Observing that entry has occurred and conditions in the industry are conducive to its sustainability and intensification avoids dependence on both independent structural analysis—of the relevant market, of the pertinent elasticities and cross-elasticities of demand—and evaluations of the economic results, the uncertainty and complexities of which were graphically characterized by Professor Stigler. It provides simple, objective tests.

- of sufficient actual rivalrous behavior
- in markets—product, service and geographic—defined *by that behavior and the reach of existing, competitive facilities,*
- the likelihood of whose sustainability is enhanced by their provision by heavy sunk investments, the scope of which defines the relevant geographic market—at *low incremental costs*.

In view of the rapid pace of technological change in telecommunications, I believe that the sustainability of competition and the concomitant signal that it is time to deregulate are assured when incumbents have lost what might appear to be rather modest proportions of their customer bases, e.g., TELUS' proposed tripping signal of 5 percent. The signal to deregulate must however clearly be

- low enough to avoid soft competition by incumbents until the (higher) limit is reached—such conduct as, by general agreement, United States Steel Corporation exhibited during decades after its formation (holding a price umbrella over its rivals and accepting the consequent decline over decades in its share of national raw steel production from 61 to 33 percent between 1904 and 1938, by competing "softly," in

[8] Jonathan E. Neuchterlein and Philip J. Weiser, *Digital Crossroads: American Telecommunications and Policy in the Internet Age 196 (2005) (quoting George Mannes,* Comcast Faces Long Haul on Phone Push, TheStreet.com July 6, 2004, at http://www.thestreet.com/pf/tech/georgemannes/10169214.html).

hope—which proved indeed to be justified—that it could in this way escape antitrust condemnation);[9]

- yet, of course, high enough to ensure that the competition is genuine and likely to persevere *and expand*—assurances all provided by (a) requiring evidence of actual genuine rivalry, (b) defining the applicable geographic market in terms of the reach of *already existing* competitive facilities sufficient to ensure that the rival will not only not be driven out or choose to depart the market but, instead, continue aggressively to expand the scope of its already demonstrated vigorous rivalry to increase its share of the market already servable by its existing facilities.

Another guarantor of workable competition, curbing the threat of only softly competitive duopoly, is the fact that cable companies, beginning with zero or low market shares, have an important competitive advantage over the incumbent, still market-dominating landline telephone companies—namely, that the addition of telephone to their basic video offerings involves only very low incremental costs—in sharp contrast to the reciprocal situation of telephone companies seeking to add video to their present telephone offerings.[10]

I turn now to the specific questions posed by the Panel:

- **What will be the role of wireless and other 'multi service' platforms?**

The presence of only two competitors (traditional telephone and cable companies) would in other circumstances have caused me hesitation: duopoly may well not in itself be dependably competitive. Although the initial circumstances in telecommunications: the dynamic character of its technology, the prospect of additional facilities-based competition—for example, of electric companies—and the differing cost structures of the two terrestrial competitors—suggests that two such may well suffice, there is also the pervasive presence and competition of a third—independently owned wireless service. This service, I understand, is

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[9] Walter Adams and Hans Mueller, "The Steel Industry," in Walter Adams, *The Structure of American Industry*, Eighth Edition, New York: Macmillan, 1990, pp. 72, 76; F.M. Scherer, *Industrial Market Structure and Economic Performance*, Chicago: Rand McNally, 1970, p. 217.

[10] "Reforming the FCC and Its Mission: Lessons from the Airline Experience," a paper presented at the Silicon Flatirons Conference, *The Digital Broadband Migration: Rewriting the Telecom Act*, in Boulder, Colorado, February 14, 2005, *Journal on Telecommunications and High Technology Law*, Fall 2005.

close to ubiquitously available in such market areas—typically from at least three separate suppliers. The CRTC has reported that as of 2003 two-thirds of Canadian households subscribed to wireless;[11] there are ubiquitous providers unaffiliated with incumbent wireline companies; and (3) TELUS' competitors in particular have 49 percent of such wireless subscribers in British Columbia and 35 percent in Alberta,[12] which presumably explains why the Commission has already refrained from regulating that service.

While I have mentioned the striking fact that in just the last few years some six percent of households (par. 46 of my TELUS testimony) have regarded wireless as sufficiently substitutable for traditional wire-line to have switched over entirely, the overwhelming majority evidently still consider it as supplemental rather than substitutable. That percentage can be expected only to rise over time, however, as younger subscribers have far less difficulty than their grandparents relying exclusively on wireless (I speak from unequivocal personal experience)—which has the important inherent advantage over both telco and cable of mobility—and those carriers are in turn forced by VoIP competition to introduce calling plans that are distance-insensitive.

This raises immediately the question of whether the present stand-alone offerers of VoIP service require regulatory protection to assure them continued access to the providers of broadband Internet. Here, the CRTC has already found—I find persuasively—that competition among the present three, rather than merely two (landline telephone and cable) seems to have been sufficient to ensure that access and hence the offer of VoIP services by third parties at both wholesale and retail levels—justifying its decision "to decline to impose an access condition on providers of high-speed access…because no party could point to any incidence of anti-competitive behavior with respect to access-independent VoIP services."[13]

More immediately relevant as a source of competition in the increasingly important broadband market, TELUS asserts, has been the development of fixed wireless broadband service, WiFi and WIMAX:

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[11] CRTC Competition Report, p. 102.

[12] *Ibid*, p. 64.

[13] Telecommunications Policy Review Consultation paper, TPR panel, June 6, 2005, section A, part II, p. 38.

> These technologies...have the potential of competing with wire-line access in every market and particularly in suburban, rural and remote areas.[14]

In this discussion of the conditions that call for increasingly greater reliance on deregulation, I have in effect bypassed most of the specific questions posed by the Panel. I believe it will be helpful for me to return to them now.

- **Will full telco-cable convergence occur in the main telecom service markets - i.e. two competing 'full service' platforms?**

I have no particular expertise in technological prognostication such as the question calls for. But the sufficient answer, I suggest, is that deregulation should be extended only when and where "full telco-cable convergence" actually does provide "two competing 'full service' platforms," and the competitive cable system has achieved the five percent of the market recommended by TELUS and in the ubiquitous presence of wireless.

It is significant, I suggest, that neither the Panel's questions nor my discussion to this point have called for separate considerations of "local" and "long-distance" service, which has dominated policy in the United States at least a half century before the decree terminating the Department of Justice's antitrust suit against AT&T and on through the Communications Act of 1996. As Professor Crandall pointed out in his testimony in support of the TELUS proposal, whatever distinction still prevails between "local" and "long-distance" service in the minds of subscribers, they "are becoming indistinguishable from the supply side," as a result of which "wire-line, wireless, and Internet telephony services increasingly bundle local and long-distance services together." (par. 6)

- **What measures are required to protect against anti-competitive abuses of market power – through sector-specific measures, or through economy-wide competition laws – or both?**

Whether those "anti-competitive abuses" relate to combinations or agreements potentially restrictive of competition, or unfairly exclusionary or predatory practices directed against competitors, deregulation inherently implies a shift in responsibility for their prosecution from industry-specific regulators to the antitrust authorities, for whom that is their

[14] TELUS' Submission Regarding Technology and Markets, August 15, 2005, par. 128.

special mission and competence—in which event I would add the condition that they draw upon the special capabilities of the regulatory agencies in this particular industry.

As one who has been essentially uninvolved in the antitrust experience and literature over the last half-century, I do not feel competent to discuss authoritatively the question of whether any additional measures are required to protect against anti-competitive abuses. I do have two general opinions, however, that I feel impelled to add.

The first is that I do not fully endorse the trends of the last several decades in the interpretation of the antitrust laws, under the influence of the Chicago School, however (see my *Fair Competition: The Law and Economics of Antitrust Policy* (with Joel B. Dirlam), Cornell University Press, 1954), I feel constrained to add my belief that the laws' emphasis on "fairness"—defined as the ability of suppliers to compete on the basis of their relative efficiency and attractiveness of their offerings—should not be abandoned.

The other, however, about which I can speak with authority and have strong convictions, is almost sufficiently conveyed in the title of my two little books that I published a few years ago: *Letting Go: Deregulating the Process of Deregulation* (Michigan State University Institute of Public Utilities, July 1998) and *Whom the Gods Would Destroy, or How Not to Deregulate* (AEI-Brookings Joint Center for Regulatory Studies, May 2001). They spell out my warning that in the process of deregulation, the greater danger is posed by the natural unwillingness of regulators to rely primarily on competition—subject, as elsewhere, to the general antitrust laws. My own experience has been that, responsible for the performance of particular industries, regulated previously on the assumption that they were in some way naturally monopolistic, regulators tend to distrust free competition and to attempt to retain authority, under sector-specific laws, to err on the side or protecting putatively disadvantaged competitors. That danger, I believe, is greater than the danger that the antitrust authorities alone will pay insufficient heed to what I referred to fifty years ago as preservation of "fair" competition.

Questions such as these suggest the Panel feels there is a need for regulatory protections—of competitors from predatory incumbents and of consumers from exploitation in the interim. It has been my experience that not only is it futile to try to predict what the market will look like, particularly in the presence of such rapidly changing technology, it is also unnecessary; when there is sufficient facilities-based competition continued regulation is both unnecessary and harmful. See, for example, my summary of my experience in airlines deregulation:

> What I propose to explain here is my conversion from a belief that gradualism is actually desirable to an advocacy of achieving as quickly as possible something as close to total deregulation as the law will permit.[15]

What I discovered, in brief, once we conclude competition will be effective, as the TELUS proposal prescribes, continued regulation is not only productive of distortions, but also thereby discouraging the continued investment in innovation that promises to perpetuate the creative, dynamic competition upon which the case for deregulation rests.[16]

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[15] "Applications of Economics to an Imperfect World," the Richard T. Ely Lecture, *American Economic Review*, Vol. 69, May 1979, p. 5.

[16] *Whom the Gods Would Destroy, or How Not to Deregulate*, AEI-Brookings Joint Center for Regulatory Studies, May 2001.